CHAPTER 13

Management Information System

13-100 General

1. A steady growth in the use of automated data processing equipment (ADPE) and particularly small computers has resulted in public laws, regulations, and policies at various levels of government. The policy of the Department of Defense is to improve productivity and mission performance through-the application of end user computing technology and to document the resulting savings or productivity impacts. The computer-related objectives of AFRTS are to seek effective management of information resources by:

a. Clarifying management responsibilities.

b. Facilitating information sharing through standardization.

c. Facilitating the cost-effective competitive acquisition and use of technology through centralized planning, development, and acquisition. .

2. This chapter establishes policies, procedures, and responsibilities for the management of information resources within the AFRTS. It applies to all AFRTS activities using or contemplating the use of computers or word-processors. This chapter also describes minimal procedures for the accountability, care, and maintenance of information hardware and software.

3. For the purpose of this Regulation, information resources are defined as general purpose microcomputers and word processors intended for the creation, storage, processing, and retrieval of information to enhance the administration and operation of budget, property, maintenance, personnel, other office functions, or broadcast functions. This chapter focuses on small computers and/or word processors. That is, a computer or word processing system wherein the cost of the entire system does not exceed a first year cost of $10,000 per work station. Information resources within AFRTS are standardized in accordance with DoD data processing and procurement policies. Because AFRTS information resources are used to conduct a specialized DoD mission, special care must be taken to ensure utilization, control, replacement, and disposition meet DoD objectives.

13-101 Responsibilities

1. The Director, AFIS, has appointed the AFIS Resources Manager as the Senior Information Resources Manager (IRM). The Assistant Director, AFRTS, coordinates and implements policies and actions for the satisfaction of IRM objectives within AFRTS. Responsibilities include:

a. Supporting development of an IRM system for AFRTS activities.

b. Developing policy, plans, procedures, and controls of information resources.

c. Assuring AFRTS IRM policies are consistent with public law and with policy of higher authority.

d. Designating an AFRTS IRM within the office of the Assistant Director of AFIS for AFRTS.

e. The Director, AFIS, shall act as the approval authority for all computer-related acquisitions for AFRTS activities worldwide.

2. The AFRTS IRM's responsibilities include:

a. Planning, coordinating, developing, and managing policy and procedures for the AFRTS IRM program.

b. Providing guidance on planning for and using information technology .

C. Evaluating IRM activities, procedures, and policies.

d. Maintaining accurate inventory records of AFRTS information resources.

e. Developing procedures to ensure information collections are justified; non-duplicative ; meet essential needs; and are controlled, secured, and standardized.

f. Establishing and managing of AFRTS procedures to ensure effective economic. acquisition and use of information.

3. The Director of each Military Department Broadcasting Service, to help provide for orderly application of information resources, shall insure that the Director, AFIS, is kept fully informed regarding IRM"activities. At a minimum, the Director, AFIS, shall be informed of:

a. Identification of all information requirements.

b. Requests for modification of standardized AFRTS software and measures implemented to prevent modifications to AFRTS information systems or data without prior review and approval of AFIS.

c. Identification of information activities or requests for information that appear to be redundant or without sufficient value to warrant the expenditure of fiscal, human, material, or other resources necessary to fulfill them.

d. The current inventory of information resources within his or her activities or which are being used by his or her activity.

e. User-submitted applications software.

4. Locations with computer resources:

a. The complexity of information handling, and the highly pilferable nature of small computers, peripherals, and supplies make computer resources a high risk environment. The assignment of an Information Resource Manager and the education of users in the need for data discipline are highly desirable at any location using word processors or computers.

b. Information Resource Managers:

(1) Are responsible for monitoring awareness and adherence to established practices and policies regarding use of information equipment. Normally, the IRM becomes the focal point for information equipment utilization at a particular location.

(2) Serve as primary equipment custodian and point of contact for all information equipment and software at a particular location. This custodial duty does not include computer or automation systems dedicated solely to the physical control of devices (e.g., record and/or playback automation systems or similar control devices).

(3) May delegate custody of software and data control.

(4) Maintains integrity and security controls over official data files and manages program and/or application development at the location. No program and/or application development shall be performed locally without full identification of the requirement to, and subsequent approval by, AFIS. This requirement does not apply to developments requiring less than 4 hours to complete.

(5) Performs audits and/or self-inspections as required, but at least semi-annually, to insure that only Government work is accomplished on Government information resources, unauthorized software is not in use, and authorized software is properly maintained.

(6) Advises higher levels when maintenance or malfunction problems occur. Maintains a log of software and hardware malfunctions.

(i') Is responsible for requisition and control of expendable supplies required for local utilization of small computer resources. This includes, but is not limited to, diskettes, cartridge tapes, paper, ribbons, plotter pens, etc.

(8) Maintains current copies of required guides, instructions, and manuals in the small computer work space.

c. Small Computer Users:

(1) Shall submit requests for modifications or increases in small computer resources (hardware or software) to local Information Resource Manager for review and forwarding as necessary. Requests shall be forwarded via the AFRTS chain of command for validation.

(2) Ensure small computer resources are protected from damage or unnecessary wear and tear based on dust, dirt, smoke, debris, maltreatment, or liquids in or around the computer resources.

(3) Coordinate with local Information Resource Manager prior to beginning development of any program and/or application.

(4) Update software as authorized and document changes.

13-102 Operations

1. Proliferation of small computers has steadily increased during the past several years. Managers are beginning to realize the benefits that can be derived through their use. Proper management control of these systems is required to eliminate duplication of effort among users and maximize standardization. The function of information resources or computers is to provide improved support for management, operations, and maintenance and/or logistics requirements for AFRTS activities.

2. General Operating Provisions:

a. A copy of this Regulation and appropriate users' guides are required reading for all word-processors, computer users, and supervisors.

b. AFRTS computers and word processors shall normally be used as stand-alone systems or connected via the AFRTS Organizational Network of Extended Terminals (ONET). Interconnection with existing systems other than ONET must be approved by AFIS and be in accordance with the provisions of all host unit and/or community Automated Data Processing System (ADPS) policies.

c. AFRTS small computer operations do not require formally trained ADP personnel. No increases in manpower shall be authorized for managing, operating, or programming small computers in AFRTS.

d. AFRTS computers shall not be used for processing classified data.

3. Software developed or modified within AFRTS must be documented in an orderly fashion as development proceeds. Documentation should address three areas:

a. Program Use and/or Function. Prospective users must be able to determine whether the application program meets their functional requirements. This determination should be possible by examining the program use and/or function. Descriptions are prepared by the programmer and updated by individuals who modify applications.

b. System Operation. Information must be provided on how to load, set up, and access any given program. A short checklist is usually the most useful format. A step-by-step narrative that informs the user how to use every function and what data is appropriate for every field. This should be done in the style of the ONET manual and should use as many example screens as possible.

c. Program maintenance and/or modification. Programs do not remain static. A requirement to change a program, even if assigned to the original programmer, can be greatly facilitated by adequate program documentation. In addition to a well annotated program listing, the documentation should include a description of any data files used, identification of other programs using the same data file, and all programs involved in sequential or-modular processing steps. For complex programs, logic diagrams or flow-charts usually facilitate understanding of the program structure and logic.

4. Small computer resources shall not be acquired without the written approval of the Director, AFIS.

5. Training:

a. Users shall be furnished with hardware, software, and all documentation necessary for hardware and software operation (e.g., manuals, operating system guides, etc.). Users are expected to read manuals provided and learn to operate small computer resources as soon as practical. Implementation of new systems or software shall include special training for selected individuals whenever possible. Such training shall normally be afforded to individuals identified by network and/or station commanders. Specially trained individuals shall be responsible for training others at their duty locations.

b. Self-paced correspondence or after-duty education courses are available in many areas. Users are encouraged to take advantage of such opportunities for personal and professional growth.

c. Users shall identify special training requirements through normal command channels.

6. Programming:

a. The availability of high quality, inexpensive, commercially developed software application packages is a critical element in user acceptance of end user computer technology. The Department's approach to software investment for end user computers shall emphasize selection and use of professional quality software in the following order of preference:

(1) Defense or public domain software packages that have already been developed and validated.

(2) Commercially available software packages.

(3) Development of custom software.

b. In those cases where software must be developed, established software management practices and standards should be followed. These standards are contained in DoD Instruction 7935.1 (reference (i)).

c. Software development shall be managed to assure that:

(1) Custom software is developed only in those cases where commercial or Defense standard systems clearly cannot meet the requirements.

(2) Software is as portable as possible.

(3) Software validation is conducted prior to operational use.

(4) Copyrights of purchased or licensed software are protected. Vendor-supplied software may only be used on the system for which it was purchased. It may not be copied except as authorized by the vendor (e.g., back-up purposes). In the event of a system failure or replacement, the software normally may be transferred to the replacement system.

d. Prior to any decision concerning producing a computer program for use on an AFRTS computer, consideration should include determination that an application or program does not exist at present, application is not under development elsewhere, and the proposed program is necessary to improve conduct of AFRTS activities. Normally, this shall be done by defining the requirement in a program abstract (see paragraph e. below) sent through command channels to AFIS prior to actual development of the application. If it can be done in less than 4 hours and may have application elsewhere, develop it and send it up to higher headquarters. If it will take longer than 4 hours, write up the requirement and send it to higher headquarters. Higher headquarters may then authorize the user or local IRM individuals to develop it or may develop it fort hem. When considering whether the development must be coordinated with higher headquarters, two factors rule:

(1) Does the application have uses at other AFRTS activities?

(2) Will it take longer than 4 uninterrupted hours to finish it?

e. A program extract shall accompany all requests for software development and developed programs when forwarded to higher headquarters. Functional users shall prepare and submit a program abstract to the IRM officer. The program abstract describes the general program application required by the functional agency. The Information Resource Manager shall forward the request through AFRTS channels to AFIS.

f. All software developed using Government equipment or time is the property of the United States and not the individual programmer. No individual copyright may be claimed on such software.

g. Commercially acquired software shall be accountable by manufacturer's serial number as a pilferable item. Replacement of software or hardware that was part of AFRTS systems must include the AFIS Director's approval prior to procurement actions.

7. Privately owned small computer equipment is not authorized for processing Government data. Non-standard systems may lead to waste or abuse of AFRTS resources and jeopardize standardization efforts. AFRTS activities shall be authorized to procure standard AFRTS hardware and software systems only. AFIS shall designate standard AFRTS systems. Utilization of privately owned small computers may also present problems when expendable supplies are needed.

13-103 Installation and Acceptance

1. Large computer systems require temperature and humidity controlled environments with air filtration systems to eliminate dust and other contaminants. They require complex power line filtering equipment and should not be used in carpeted rooms if they are to operate reliably. Fortunately, small computers are not as demanding. However, there are certain considerations in the choice of location that will have a direct effect on the computer's operation and reliability. This section addresses those considerations.

2. Most small computers will operate in any office environment. If the environment is comfortable for people, the small computers will generally operate with no special problems. Electrical connections should be made via electrical "spike" filtering devices whenever available. If direct sunlight is allowed to strike diskettes for an extended period of time, physical damage may occur.

a. A small computer system can be expected to serve well if allowed 50 square feet of floor space. Frequently less space will be available, necessitating special furniture, security and administration requirements.

b. To insure equipment accountability and security, a location should be chosen that restricts access to the small computer. In addition, data and software held on diskettes and other memory devices is subject to pilferage and vandalism and must be secured appropriately.

3. The IRM or designated representative shall be present for packing and/or unpacking of all small computer resources. The IRM shall notify all concerned (Broadcasting Service, AFIS, etc.) as appropriate of dispatch or receipt of small computer resources. Notification shall normally be via routine message traffic, within one duty clay of dispatch and/or receipt.

a. Message reports should indicate:

(1) Reason for report.

(2) Complete description of items including serial number.

(3) Discrepancies.

(4) Shipper method and/or tracking data (e.g. Transportation Control Number).

4. Warranties for small computer resources are specified in purchase contracts. The IRM is required to fully understand warranties and comply with any requirements by the manufacturer to ensure coverage. Returning the warranty registration form and/or card is an especially important part of the requirement.

5. Any stray electrical charge contacting the system may erase files or otherwise destroy operating systems, software and hardware. Systems should be disconnected from power sources during electrical storms.

6. Dust particles can damage a small computer or cause erratic operation of the system. Plastic covers that generate static electricity should be avoided.

13-104 Security

1. Small computers, components, peripherals and supplies are vulnerable to pilferage. Proper management of access controls and data storage is essential to data integrity and security. Security policies call for certain minimal levels of protection (e.g., TEMPEST, labeling, memory clearance, etc.) for classified functions. Sensitive information includes classified information, personal information subject to the Privacy Act of 1974, source selection sensitive information, etc. Requirements for the protection of information shall be in accordance with DoD Directive 5200.28 (reference (j)) and DoD Directive 5400.11 (reference (k)). In addition, users are encouraged to consult appropriate security and privacy protection organizations when such processing is involved. Physical security and good supply discipline must be ensured.

2. Processing classified information on any small computer system in AFRTS is prohibited. Special construction and testing is normally required to achieve a TEMPEST authorization. Processing or storage of classified information on an AFRTS small computer system should be addressed at the local level as a security violation.

3. All users must safeguard systems of records with personal data (e.g., social security number, home address, etc.) in accordance with pertinent Service regulations. Storage media and printed materials must be clearly marked if they contain Privacy Act information. Generally, magnetic media including fixed discs must be afforded the same security required for paper containing the same information. Systems accessible by remote sites are especially vulnerable. Sensitive information must be removed from these systems when not under immediate control of authorized personnel.

4. Use of these assets for personal use, other than improvement of skills that enhance professional competence, is prohibited. In any case, computers shall not be used for games, generating documents for off-duty education courses, tracking sports pools, raffles, or other such activities. These resources may be used in conjunction with courses associated with approved official education courses on a non-interference with mission basis.

5. The IRM shall discuss the potential for fraud, waste, or abuse of small computers with every user on an annual basis or more frequently if necessary. An outline of the discussion shall be certified by the IRM, users, and senior management. This documentation is maintained as an indication of management effectiveness.

13-105 Maintenance

1. When a system malfunctions, it is the responsibility of the user, with the aid of the IRM if required, to attempt initial fault isolation. Appropriate maintenance forms should be used to report malfunctions to the maintenance activity, the same as for any other piece of broadcast equipment.

2. Actual repair, if needed, shall be via established manufacturer channels for equipment under warranty. If no warranty exists, the organization maintenance chief shall provide assistance and coordinate repairs. If special coordination with the manufacturer is required, the AFRTS IRM shall provide assistance.